

Current Water Conditions in Massachusetts

December 11, 2008



- November precipitation was above normal
- November streamflows were normal
- November ground-water levels were generally normal
- November reservoir levels were above normal

Precipitation Conditions

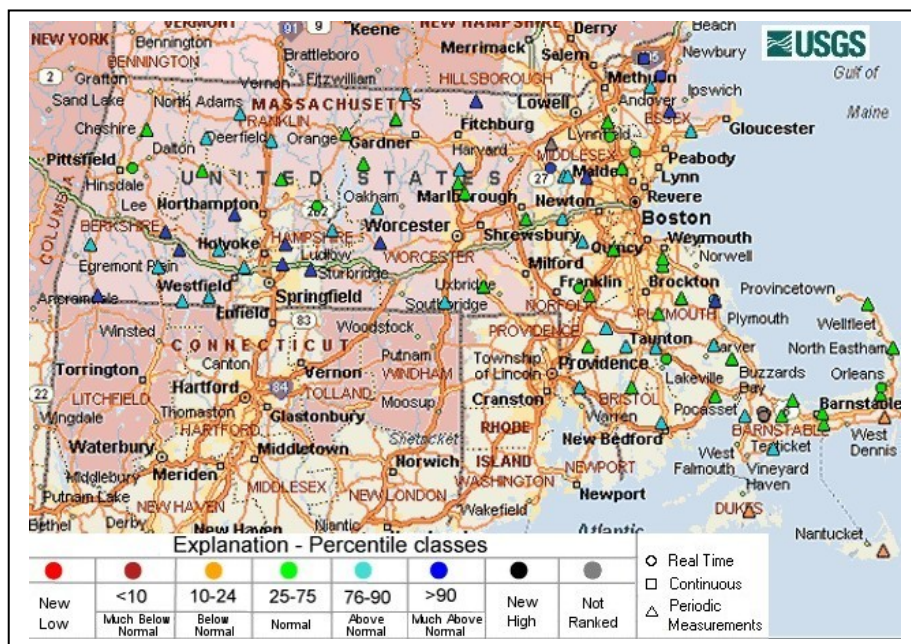
November state-wide precipitation equaled an estimated 4.40 inches, which is about 107 percent of the long-term average for November. The regions of Massachusetts received between 143 percent (Southeast) and 75 percent (Western) of average precipitation during November. Generally, precipitation resulted from three equally spaced, small to moderate, storm events. A table of November 2008 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. A map at the back of this report shows the distribution of November total rainfall in New England.

In general, December rainfall to date is below average for the period. However, a frontal passage yesterday and a coastal storm forecast to impact Southern New England tonight through Friday has the probability of producing a combined 2-4 inches of mixed precipitation.

Ground Water Levels

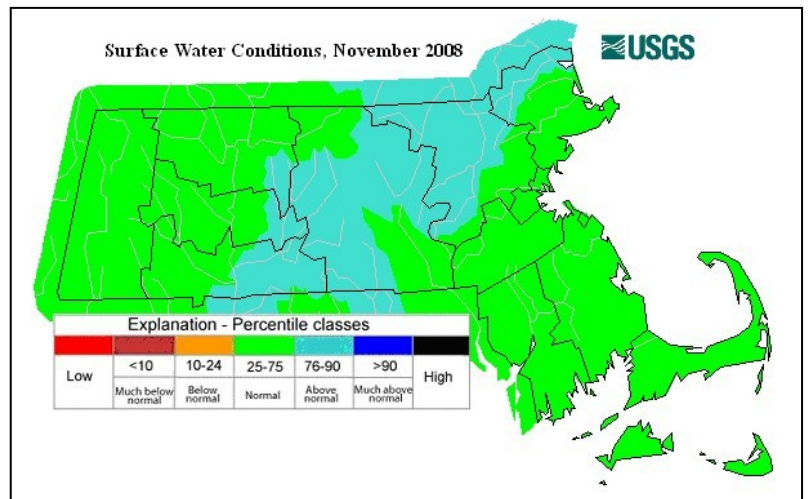
Ground-water levels reported by the United States Geological Survey (USGS) at the end of November 2008 were generally normal (green symbols on map). Some areas of above and much above normal conditions (light and dark blue symbols on map) were present in Massachusetts. The USGS assessment of ground-water levels is based on 124 wells in Massachusetts and Rhode Island with 10 or more years of record. Ground water and surface water conditions in MADCR drought management task force regions are shown in a table at the end of this report.

The USGS Ground Water Conditions Statement for the end of November 2008 can be viewed at the web site:
http://ma.water.usgs.gov/water/water_g.htm



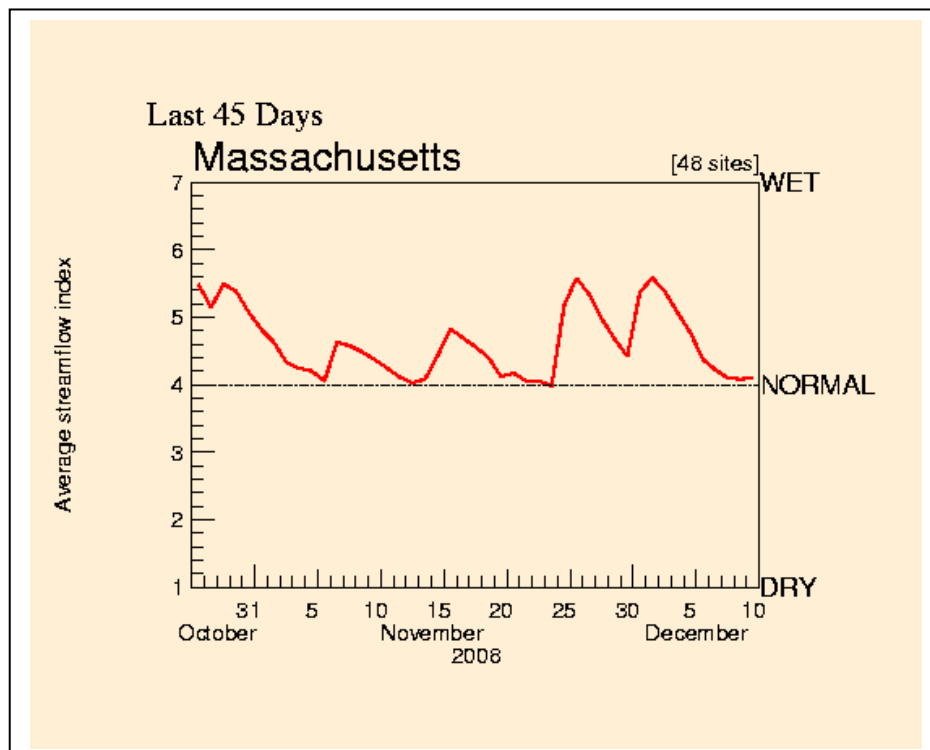
Stream Flow

During November stream flows that are monitored by the Commonwealth of Massachusetts and United States Geological Survey (USGS) cooperative stream gaging program were generally normal (green areas on map). An area of above normal streamflow (blue area on map) extended from south central to northeast Massachusetts. The graph below depicts a composite daily streamflow relative to normal streamflow for Massachusetts as of December 8, 2008. In general State-wide streamflow was above normal during the entire month of November and remained above and near normal in early December. The graph is a composite of 48 real time gages across the state with a long period of record.



Additional information on streamflow is available from the USGS web page:

http://ma.water.usgs.gov/water/water_s.htm



KEY:

- 1 = New record low for day
- 2 = < 10th percentile
- 3 = 10th – 24th percentile
- 4 = 25th – 74th percentile
- 5 = 75th – 89th percentile
- 6 = ≥ 90th percentile
- 7 = New record high for day

Water Supply Reservoir Levels

Surface water reservoir percent full values for water supply sources provided by water suppliers are listed below. The reservoir percent full values listed are for the end of November and are reported to be generally above normal for this time of year. Lynn and Beverly fill their reservoirs from off-line rivers and have started to refill their reservoirs on December 1st.

November /December 2008 Massachusetts Reservoir Status

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	96.6	Beverly/Salem	76.3
Worcester	102.6	Lynn	59.1
Cobble Mt./ Springfield	92	Taunton/New Bedford/Assawompsett	100.1

Note: N.A. Indicates data not available for this report

Drought Indices/Forecasts

The National Drought Mitigation Center's (NDMC's) December 9, 2008 Drought Monitor Map shown at right indicates no drought conditions in Massachusetts or New England.

Standardized Precipitation Index:

The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of November shows conditions ranging from normal (1-month) to extremely wet (12-months) across Massachusetts.

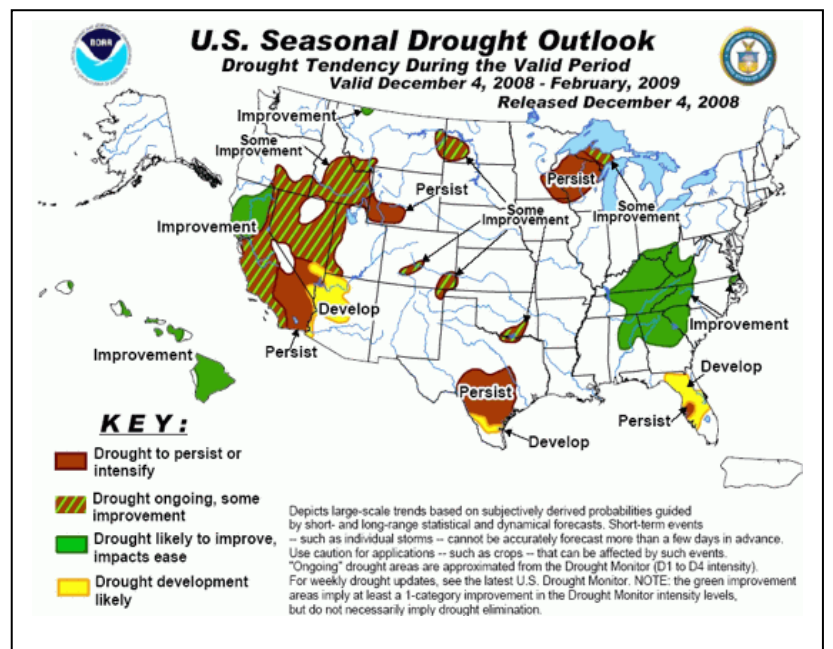
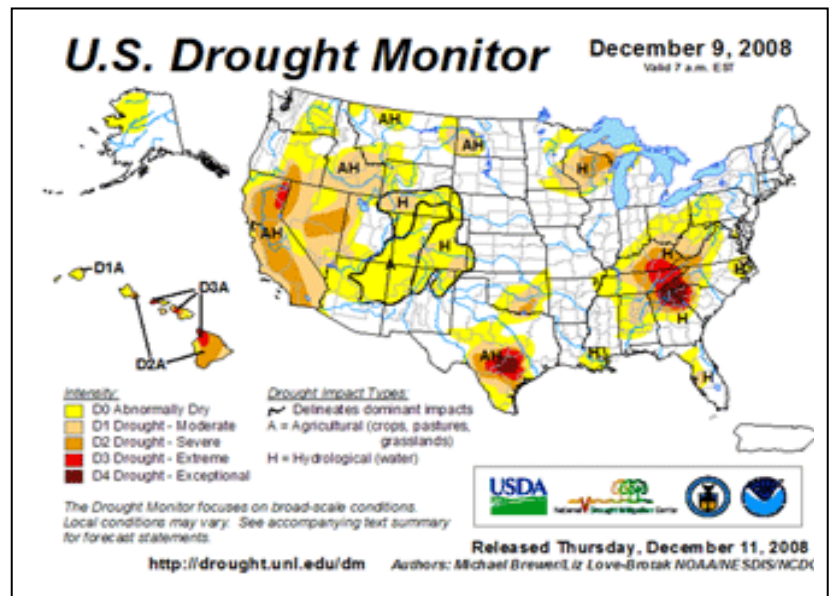
NWS/NOAA's Climate Prediction Center: The U.S. Seasonal Drought Outlook dated December 6, 2008 predicts normal conditions for Massachusetts through February 2009.

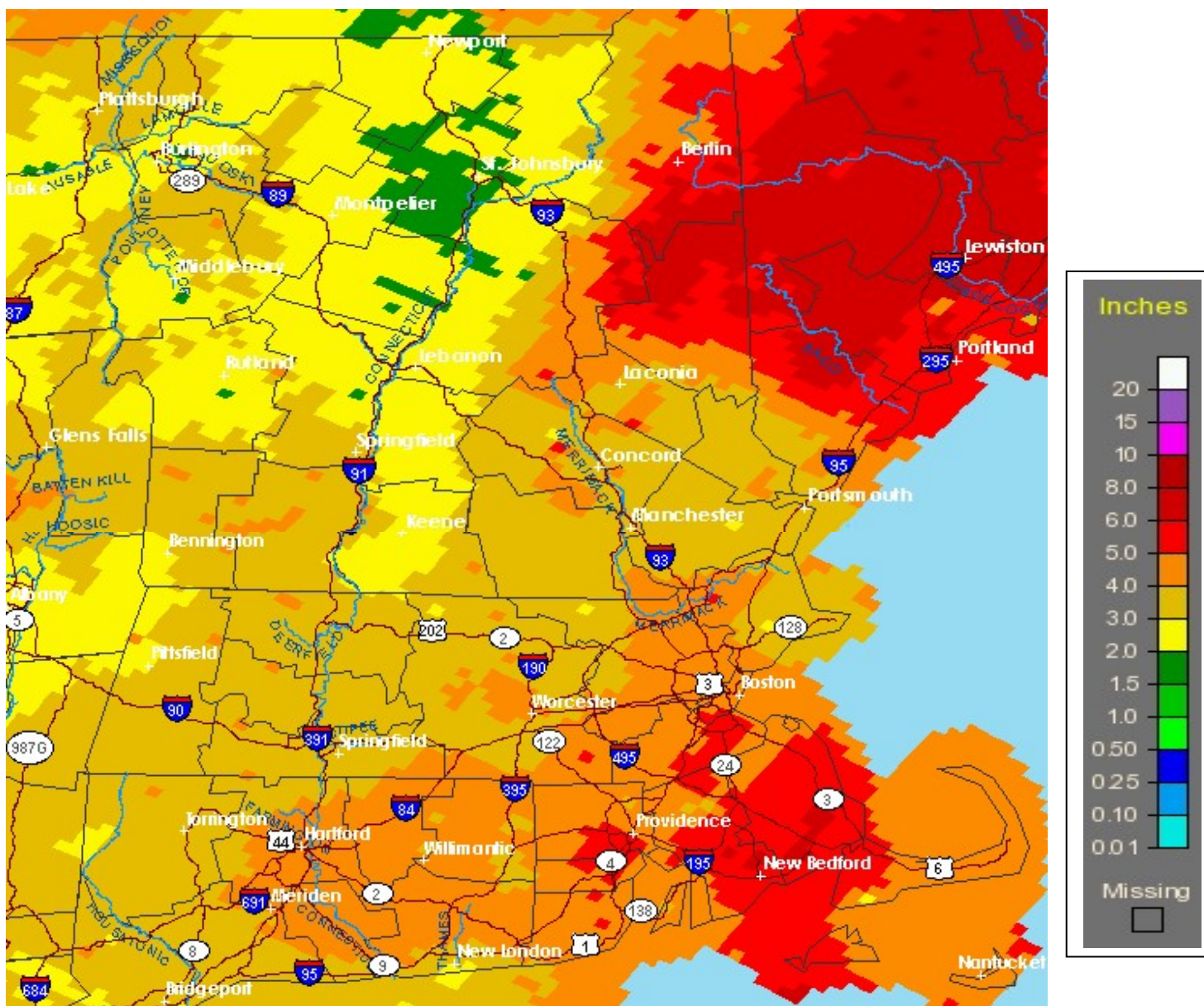
Extended Forecasts

Mixed precipitation associated with a coastal low pressure system is forecast for today through Sunday. Total forecast rain for the period is about 2-4 inches. Ice storm conditions will probably occur over extreme western MA. Minor flooding is possible in NW MA and in areas of eastern MA that correspond to the heaviest. High pressure with fair weather and seasonable temperatures should build into the area starting late Friday and last into next week.

The National Weather Service Climate Prediction Center's extended 6-10 day forecast predicts above normal temperatures and normal rainfall. The 8-14 day forecast is for normal temperatures and rainfall. The 1-month forecast is for below normal temperature and normal rainfall.

The NWS Climate Prediction Information can be found at <http://www.cpc.noaa.gov/index.php>





http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php

**TOTAL RAINFALL
NOVEMBER 2008**



GENERAL WATER CONDITIONS IN MASSACHUSETTS - NOVEMBER 2008
EOEEA and MEMA DROUGHT MANAGEMENT PLAN REGIONS
[\(link to Massachusetts regions – source MADCR\)](#)

Massachusetts Regions	Surface-Water Conditions	Ground-Water Conditions
Cape and Islands	normal	normal
Southeast	normal	normal
Northeast	above normal	normal
Central	above normal	normal
Connecticut River	normal	normal
Western	normal	normal

Note: Surface- and ground-water conditions for individual streamflow-gaging stations and wells may differ from general conditions.

This report was prepared by the Massachusetts Department of Conservation and Recreation. Data were obtained from the sources described in the report and may be preliminary in nature. Additional information, previous and future water conditions reports can be found on our web site: <http://www.mass.gov/dcr/waterSupply/rainfall/>